Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Fly by Math	DC	MA.5.G.3	Identify relationships among points, lines, and planes (e.g., intersecting, parallel, perpendicular).
Fly by Math	DC	MA.5.G.7	Graph points and identify coordinates of points on the Cartesian coordinate plane in the first two quadrants.
Line Up with Math	DC	MA.5.G.3	Identify relationships among points, lines, and planes (e.g., intersecting, parallel, perpendicular).
Line Up with Math	DC	MA.5.G.7	Graph points and identify coordinates of points on the Cartesian coordinate plane in the first two quadrants.
Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Fly by Math	DC	MA.6.PRA.3	Identify and describe relationships between two variables with a constant rate of change (e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches). Contrast these with relationships where the rate of change is not constant.
Fly by Math	DC	MA.6.G.4	Graph points and identify coordinates of points on the Cartesian coordinate plane in all four quadrants.
Line Up with Math	DC	MA.6.PRA.3	Identify and describe relationships between two variables with a constant rate of change (e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches). Contrast these with relationships where the rate of change is not constant.
Line Up with Math	DC	MA.6.G.4	Graph points and identify coordinates of points on the Cartesian coordinate plane in all four quadrants.
Line Up with Math	DC	MA.6.G.5	Find the distance between two points on horizontal or vertical number lines.
Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 7			

Activity/Lesson	State	Standards	
Fly by Math	DC	MA.7.M.3	Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; use models, graphs, and formulas to solve simple problems involving rates (e.g., velocity and density); check the units of the solutions; use dimensional analysis to check the reasonableness of the answer.
Fly by Math	DC	MA.7.DASP.2	Select, create, interpret, and use various tabular and graphical representations of data (e.g., circle graphs, Venn diagrams, stem-and-leaf plots, histograms, tables, and charts).
Line Up with Math	DC	MA.7.PRA.7	Identify, describe, and analyze linear relationships between two variables. Compare positive rate of change (e.g., y = 3x + 1) to negative rate of change (e.g., y = –3x + 1).
Line Up with Math	DC	MA.7.M.3	Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; use models, graphs, and formulas to solve simple problems involving rates (e.g., velocity and density); check the units of the solutions; use dimensional analysis to check the reasonableness of the answer.
Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Fly by Math	DC	MA.8.NSO-C.10	Solve problems involving derived quantities such as density, velocity, and weighted averages.
Fly by Math	DC	MA.8.PRA.7	Interpret the formula (–x)(–y) = xy in calculations involving such things as distance, speed, and time, or in the graphing of linear functions. Use this identity to simplify algebraic expressions [e.g., (–2)(–x + 2) = 2x – 4)].
Fly by Math	DC	MA.8.DASP.2	Select, create, interpret, and use various tabular and graphical representations of data (e.g., scatterplots, box-and-whisker plots).
Line Up with Math	DC	MA.8.NSO-C.10	Solve problems involving derived quantities such as density, velocity, and weighted averages.
Line Up with Math	DC	MA.8.PRA.4	Identify the slope of a line as a measure of its steepness and as a constant rate of change from its table of values, equation, or graph. Apply the concept of slope to the solution of problems.

Line Up with Math	DC	MA.8.PRA.7	Interpret the formula (–x)(–y) = xy in calculations involving such things as distance, speed, and time, or in the graphing of linear functions. Use this identity to simplify algebraic expressions [e.g., (–2)(–x + 2) = 2x – 4)].
Line Up with Math	DC	MA.8.G.6	Find the distance between two points on the coordinate plane using the distance formula; find the midpoint of the line segment; recognize that the distance formula is an application of the Pythagorean theorem.
Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grades 9-12 (Algebra I)			
Activity/Lesson	**State**	**Standards**	
Fly by Math	DC	MA.AI.D.1	Select, create, and interpret an appropriate graphical representation (e.g., scatter plot, table, stem-and-leaf plots, circle graph, line graph, and line plot) for a set of data, and use appropriate statistics (e.g., mean, median, range, and mode) to communicate information about the data. Use these notions to compare different sets of data.
Smart Skies			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grades 9-12 (Geometry)			
Activity/Lesson	**State**	**Standards**	
Fly by Math	DC	MA.G.G.4	Draw and label sets of points such as line segments, rays, and circles.
Line Up with Math	DC	MA.G.G.4	Draw and label sets of points such as line segments, rays, and circles.
Line Up with Math	DC	MA.G.G.18	Using rectangular coordinates, calculate midpoints of segments, slopes of lines and segments, and distances between two points, and apply the results to the solutions of problems.